

FIG. 1A

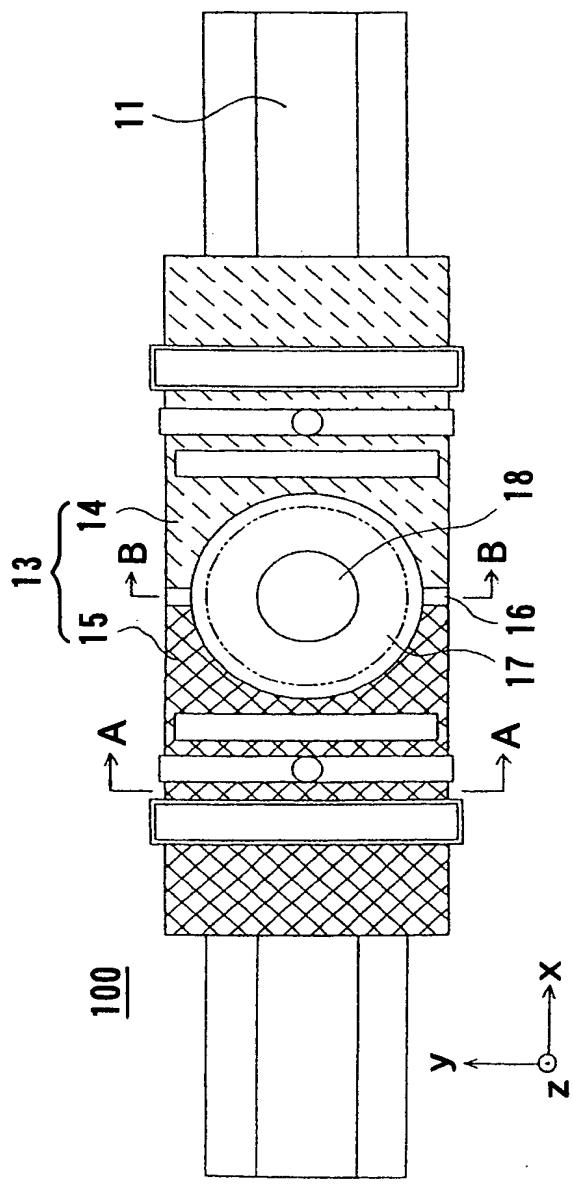
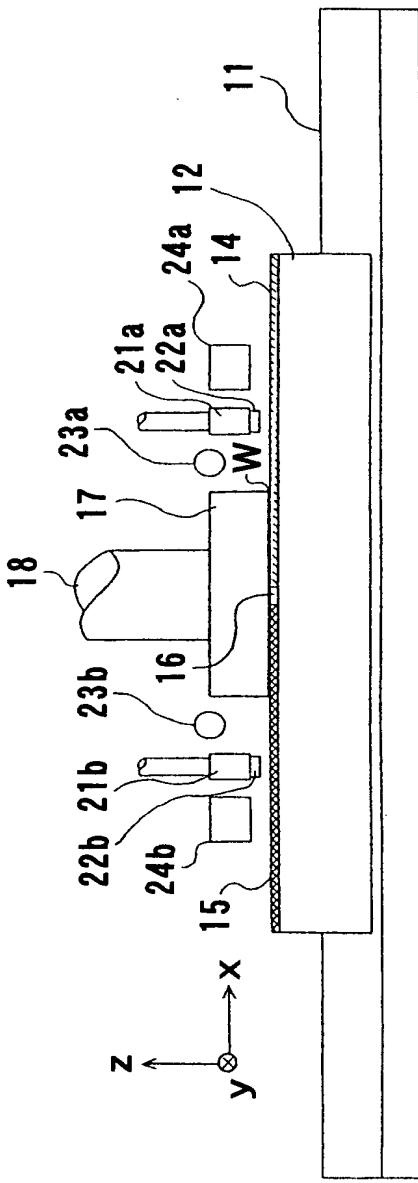
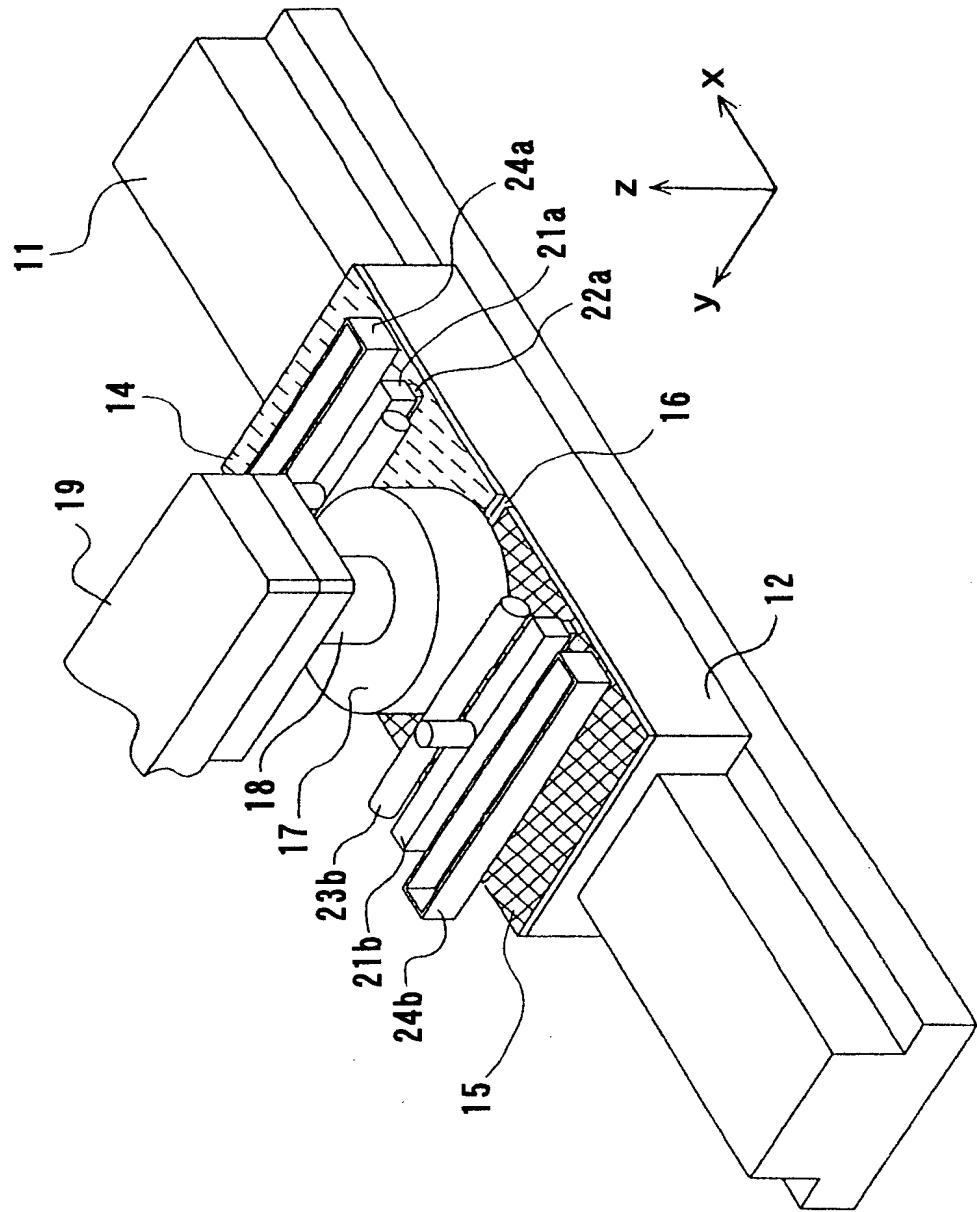


FIG. 1B

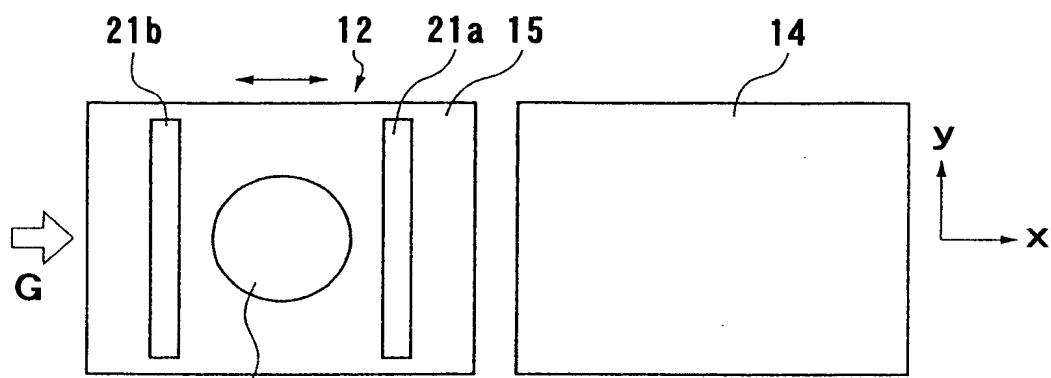


*FIG. 2*



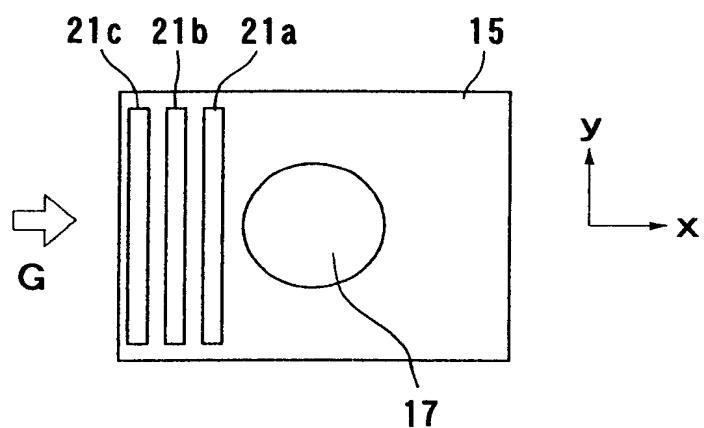
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F / G. 3A



17

F / G. 3B



F / G. 3C

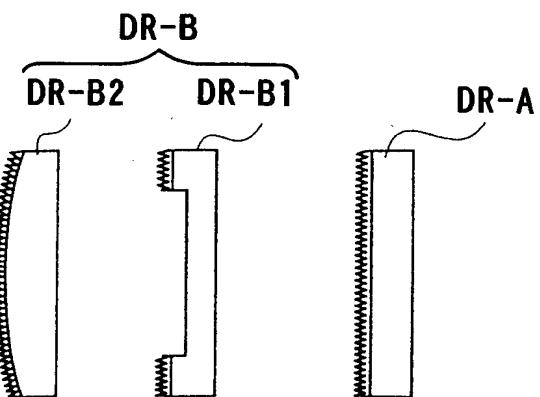


FIG. 4

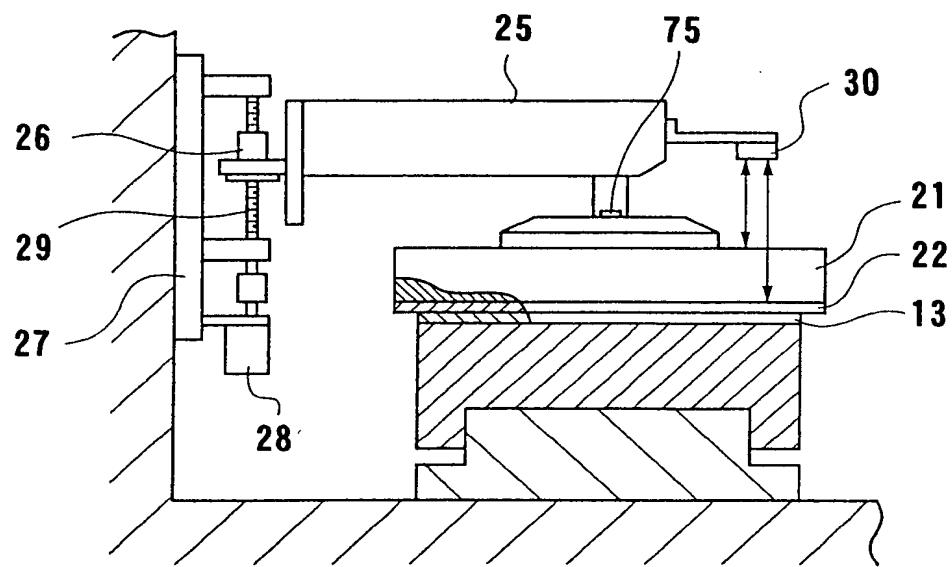
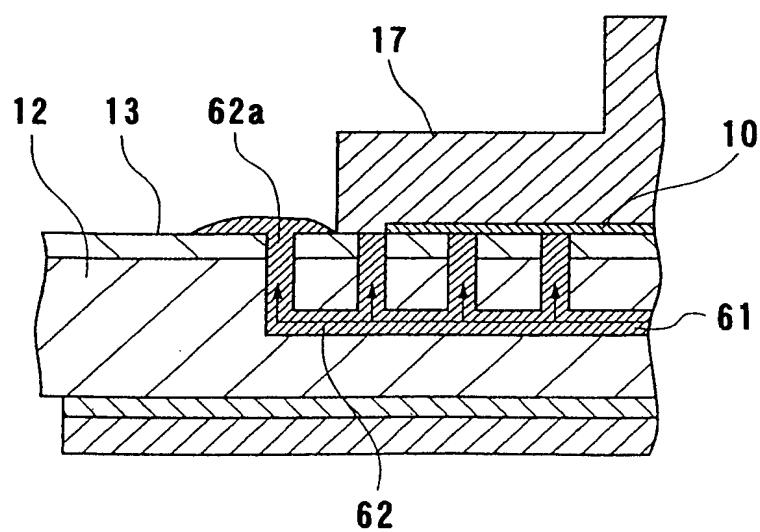
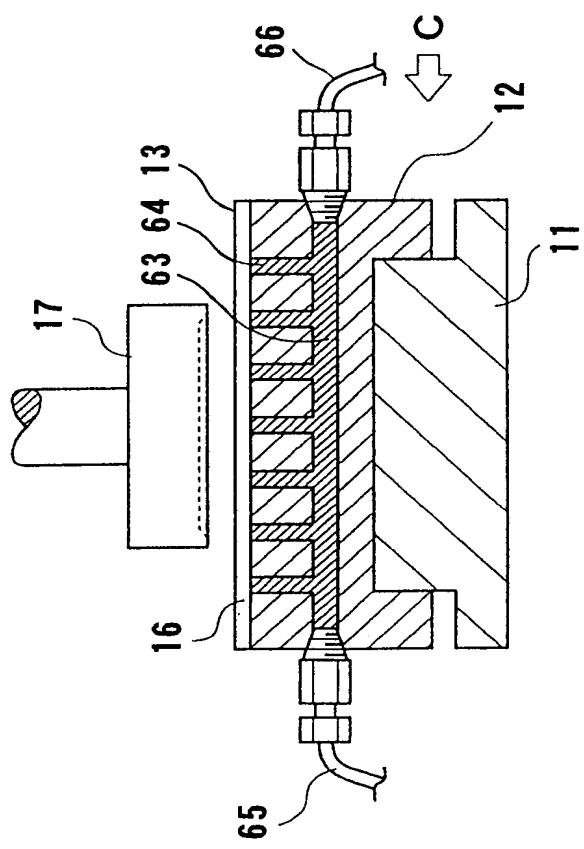


FIG. 5



*F / G. 6A*



*F / G. 6B*

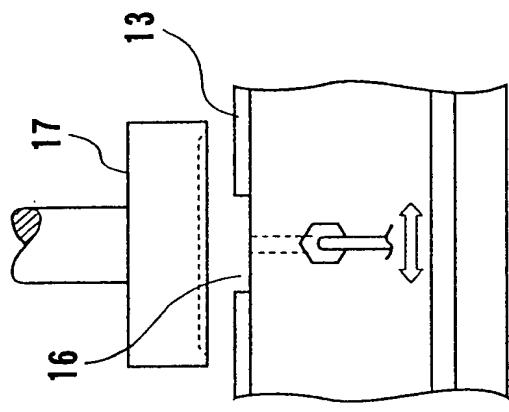
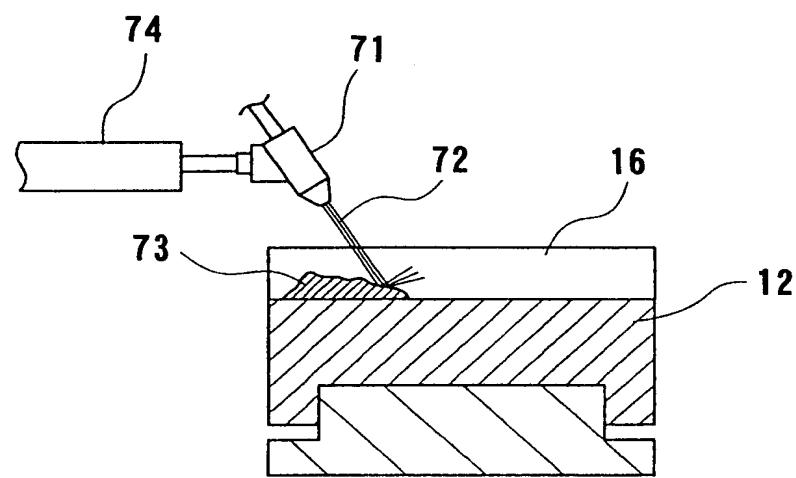


FIG. 7



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FIG. 8A

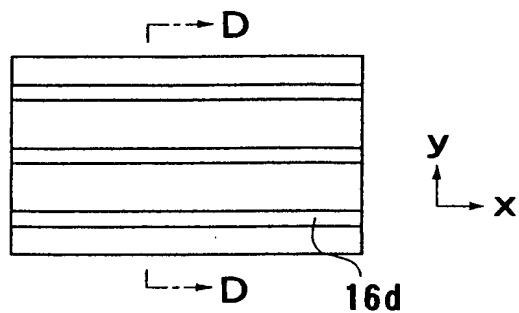


FIG. 8B

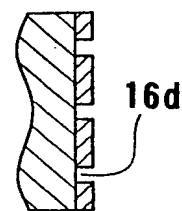


FIG. 9A

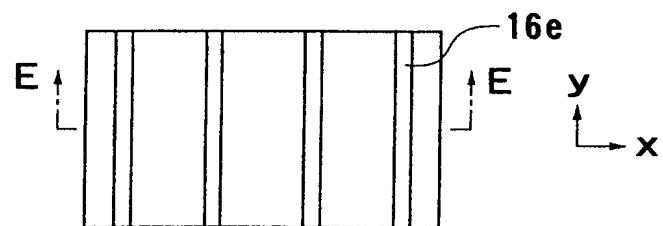


FIG. 9B

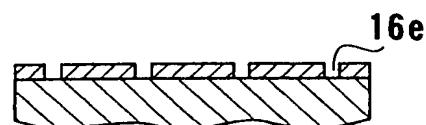
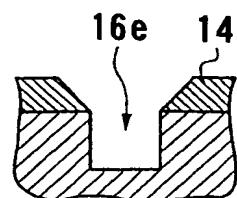
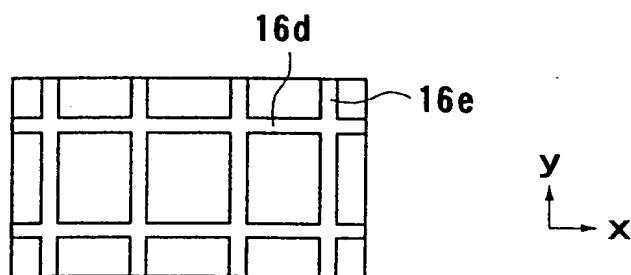


FIG. 9C

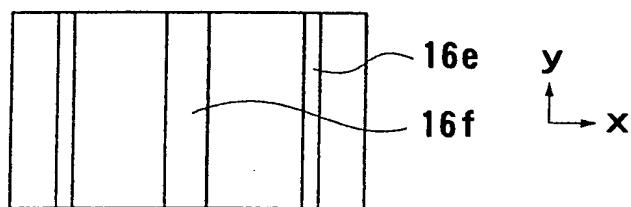


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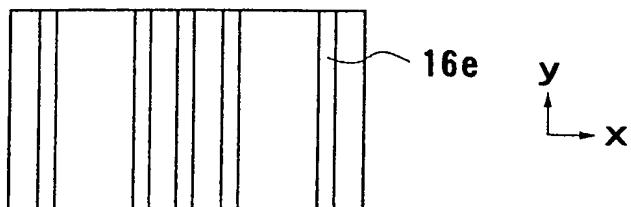
*FIG. 10A*



*FIG. 10B*

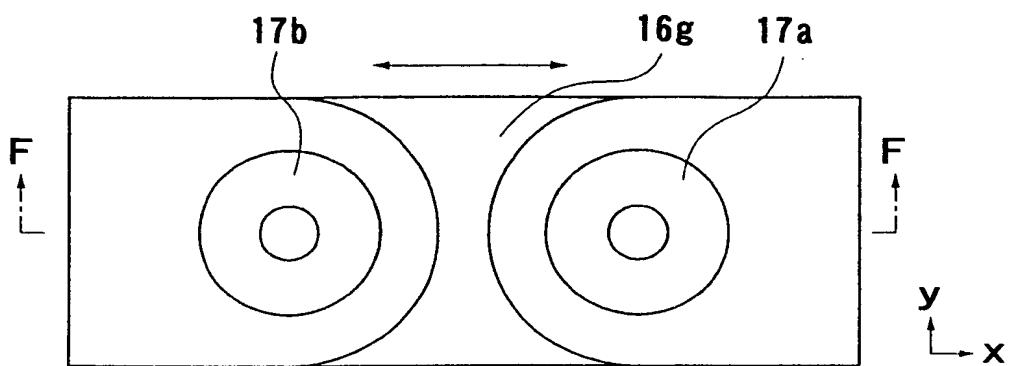


*FIG. 10C*

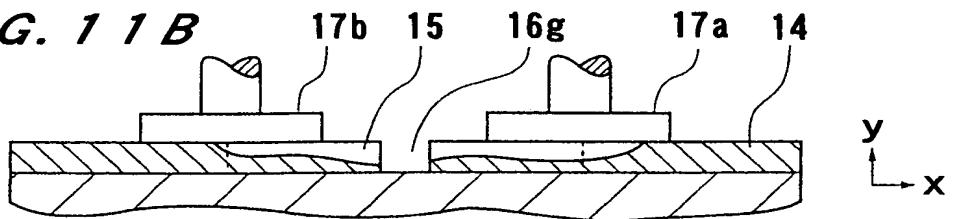


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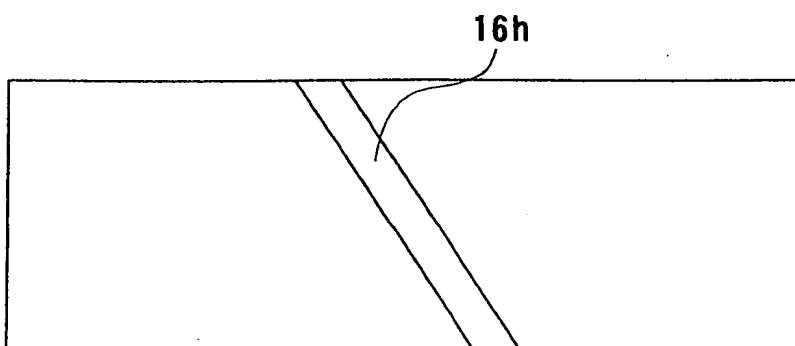
*F / G. 11 A*



*F / G. 11 B*



*F / G. 11 C*



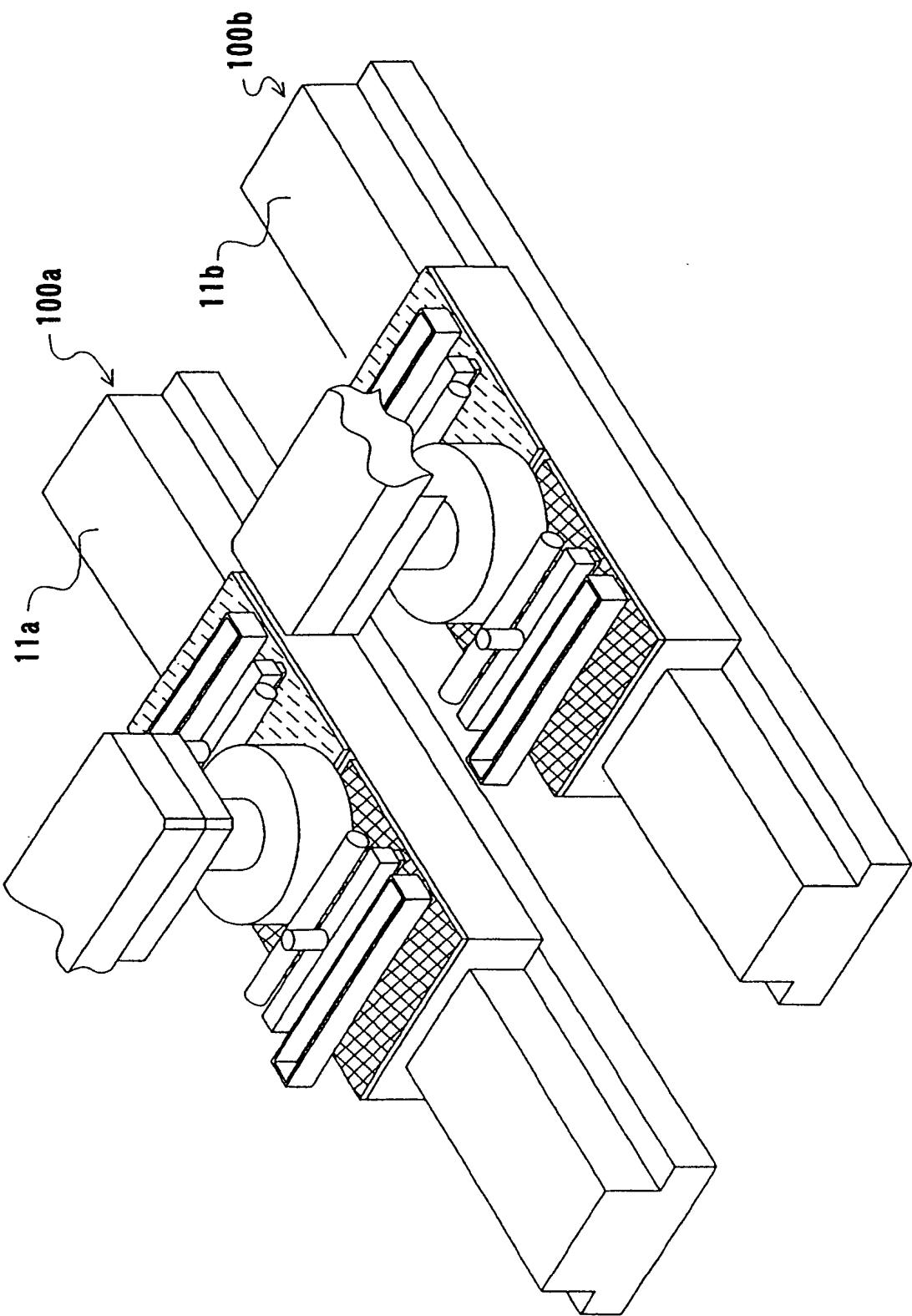
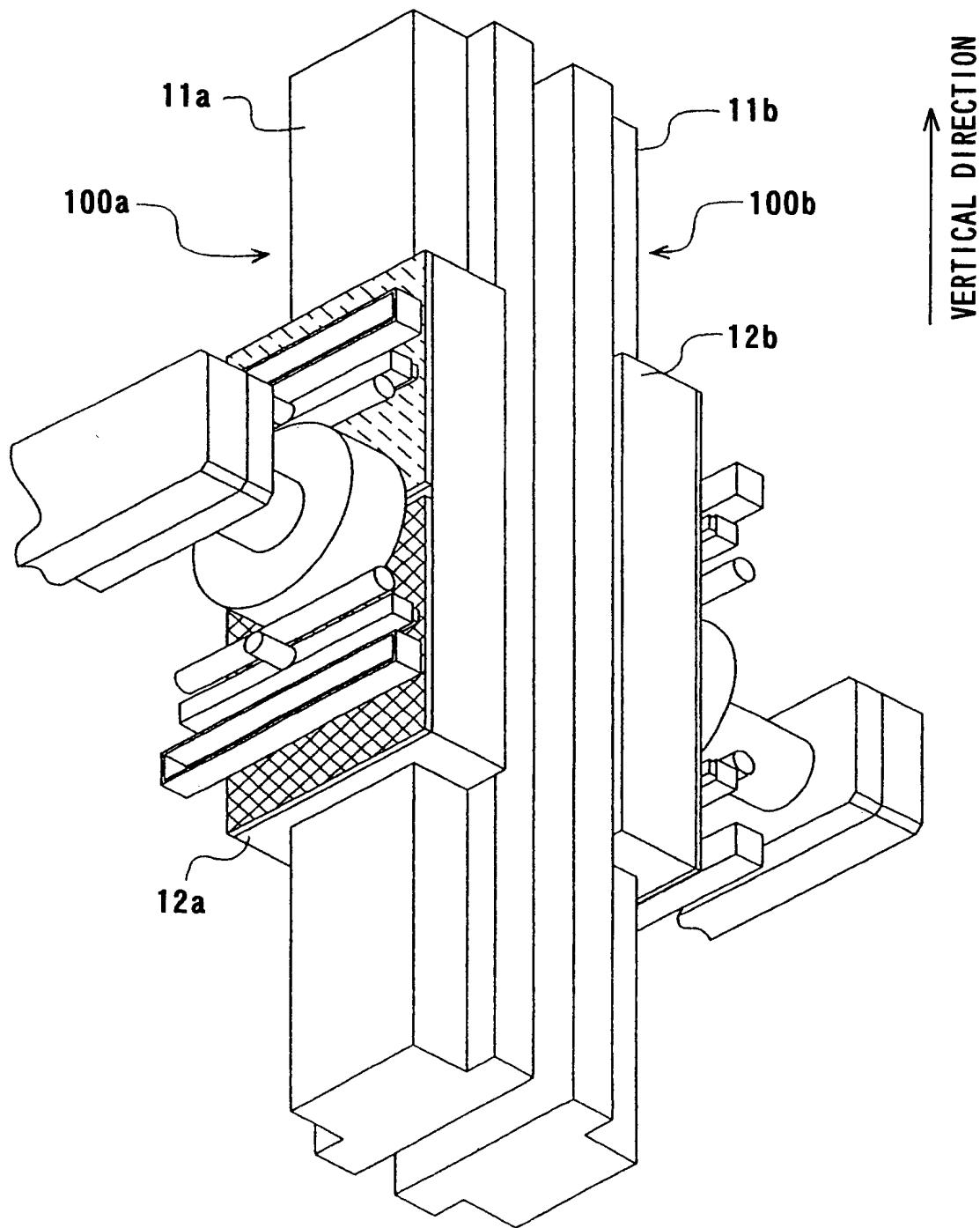


FIG. 12

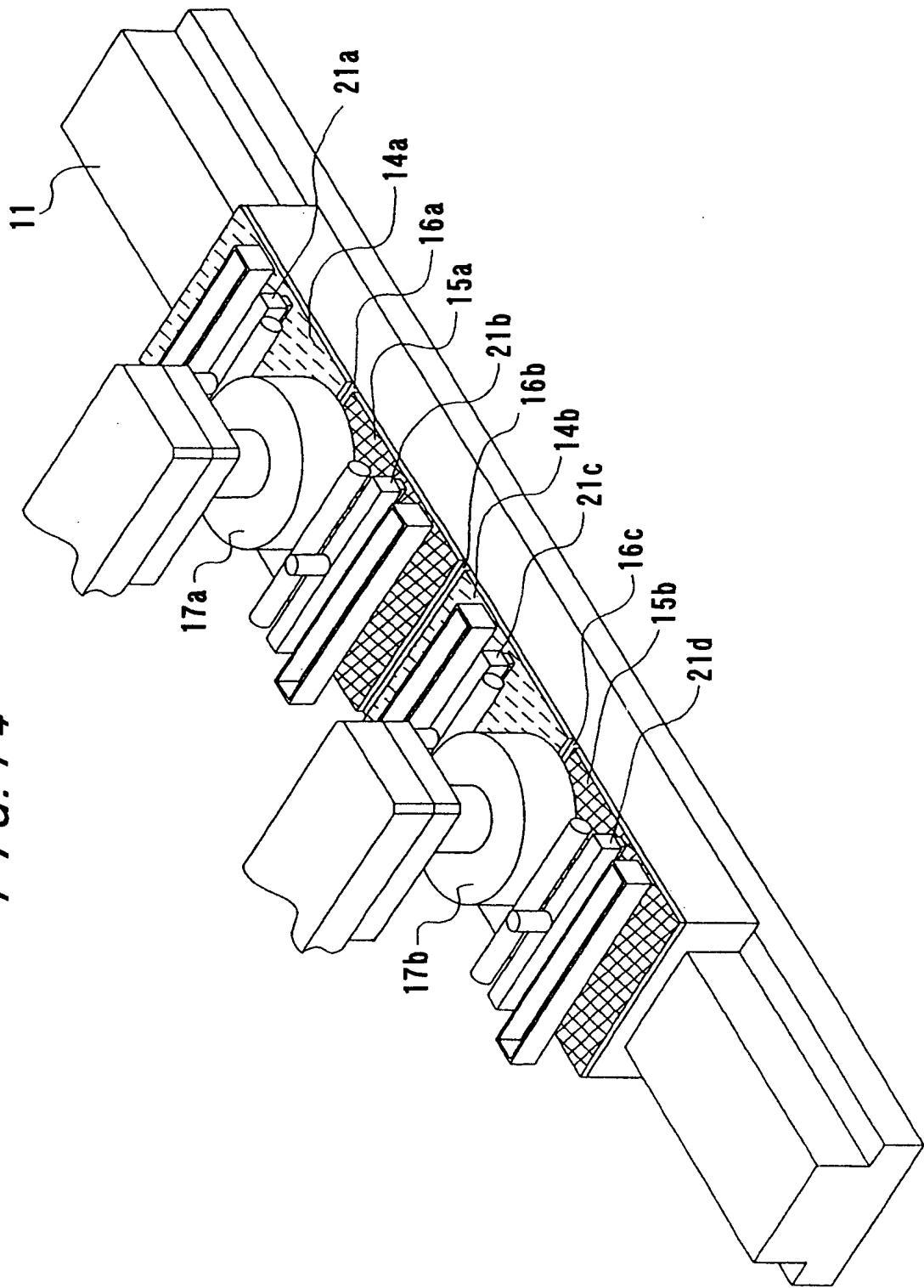
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*F I G. 13*

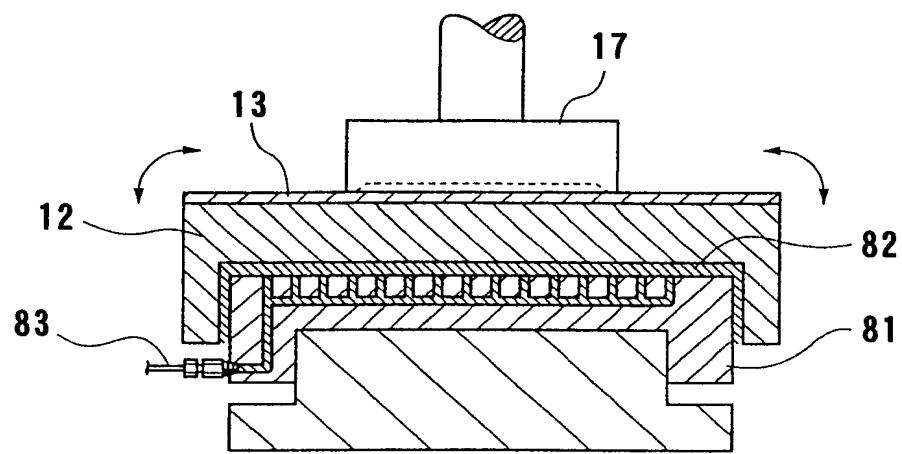


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FIG. 14

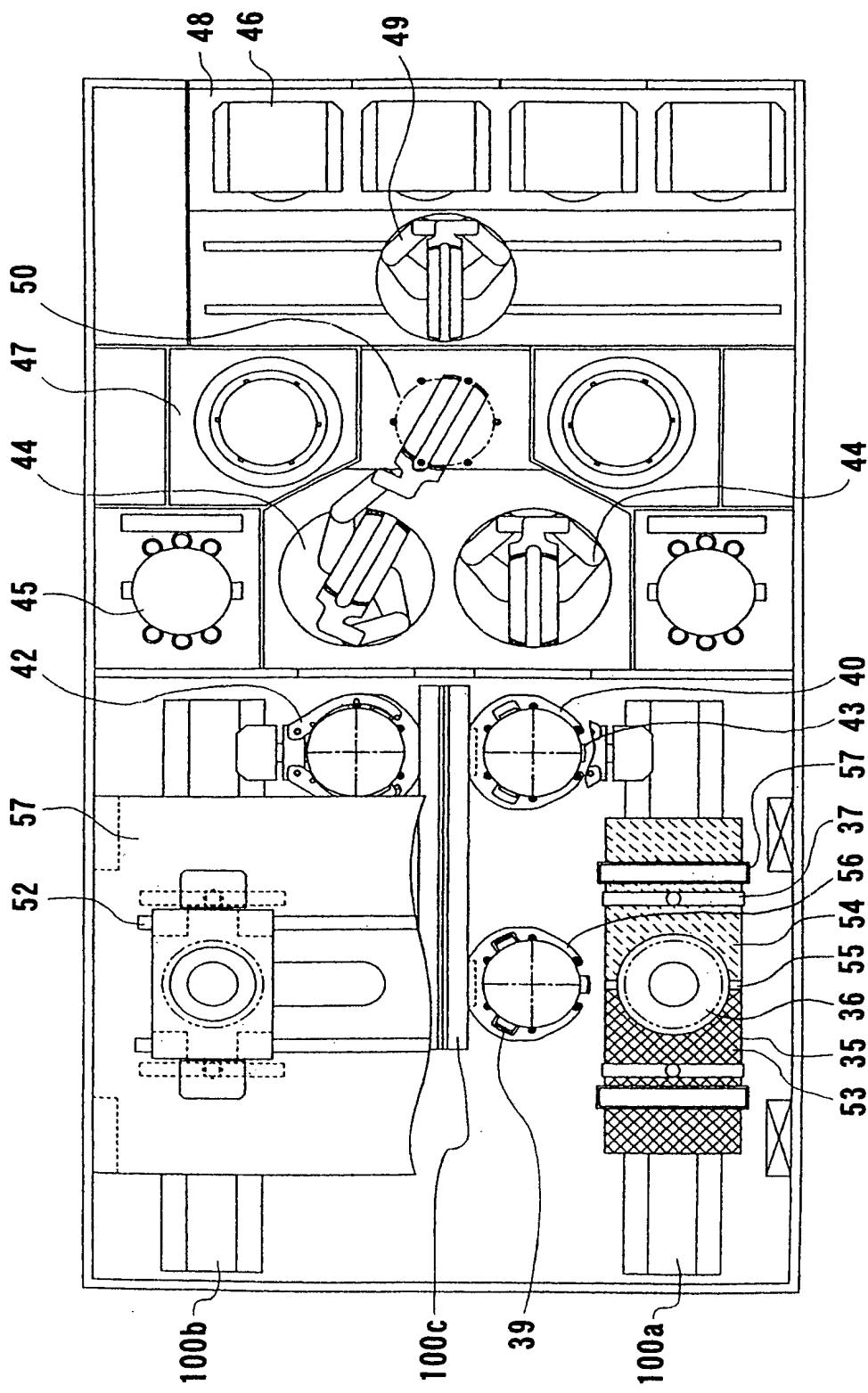


F / G. 15



*F / G. 16*

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## FIG. 17

## GENERAL CHARACTERISTICS OF LINEAR MOTORS

	LIM	LDM	LPM
CONTINUOUS OPERATION	◎	△	○
INTERMITTENT OPERATION	○	○	○
SMALL-DISPLACEMENT RECIPROCAL MOVEMENT	△	○	○
LARGE-DISPLACEMENT RECIPROCAL MOVEMENT	◎	△	○
POSITIONING PERFORMANCE	○	○	○
LARGER PROPULSION	◎	○	○
LOW-SPEED OPERATION	◎	○	○
HIGH-SPEED OPERATION	◎	○	△
OPEN-LOOP CONTROLLABILITY	○	×	○
VERTICAL DELIVERY	○	△	○
SIMPLER CARRIAGE STRUCTURE	◎	△	○
SIMPLER CONTROL POWER SUPPLY	○	○	○
PRICE	○	△	△
ADAPTABILITY	LARGE-OUTPUT, CONTINUOUS TRANSPORT  MEDIUM AND HIGH-SPEED TRANSPORT	SMALL-DISPLACEMENT, HIGH-SPEED POSITIONAL CONTROL	LOW-SPEED, HIGH-PROPULSION TRANSPORT  INTERMITTENT TRANSPORT  POSITIONAL CONTROL

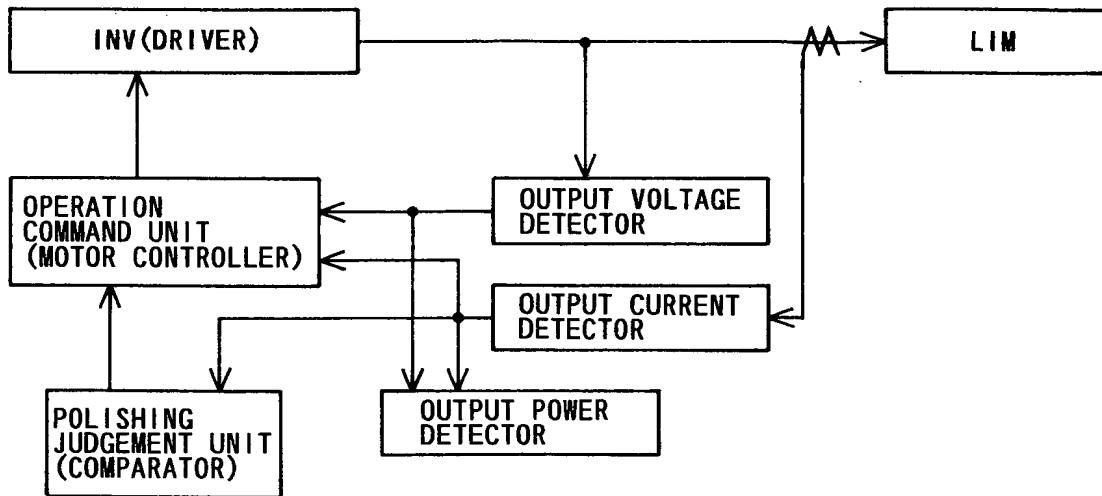
◎ : EXCELLENT ○ : GOOD △ : PROBLEMATIC × : DIFFICULT

LIM : INDUCTION MOTOR

LDM : DC MOTOR

LMP : PULSE MOTOR

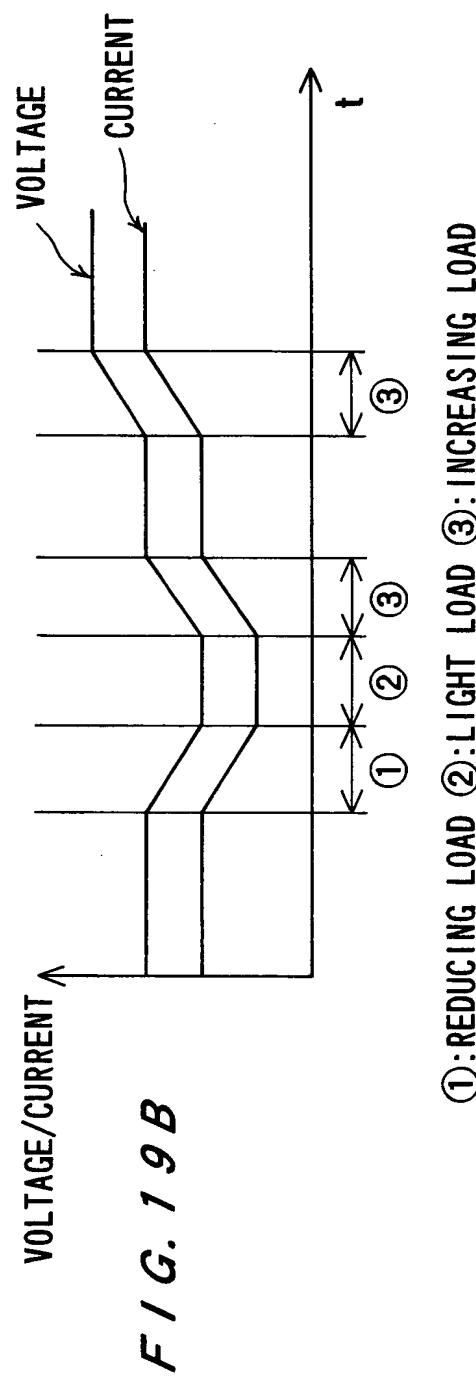
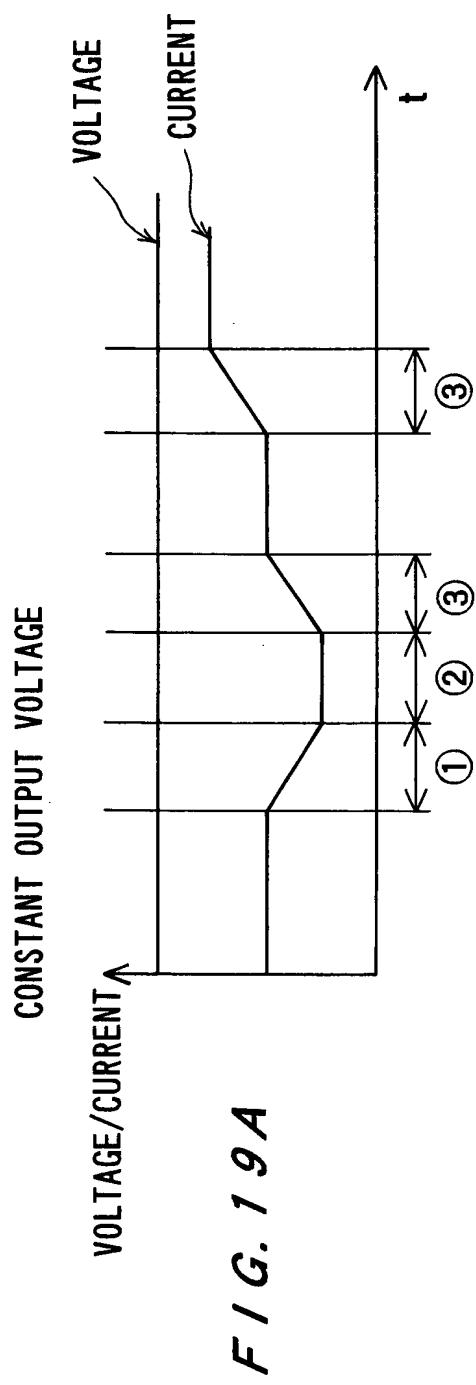
FIG. 18



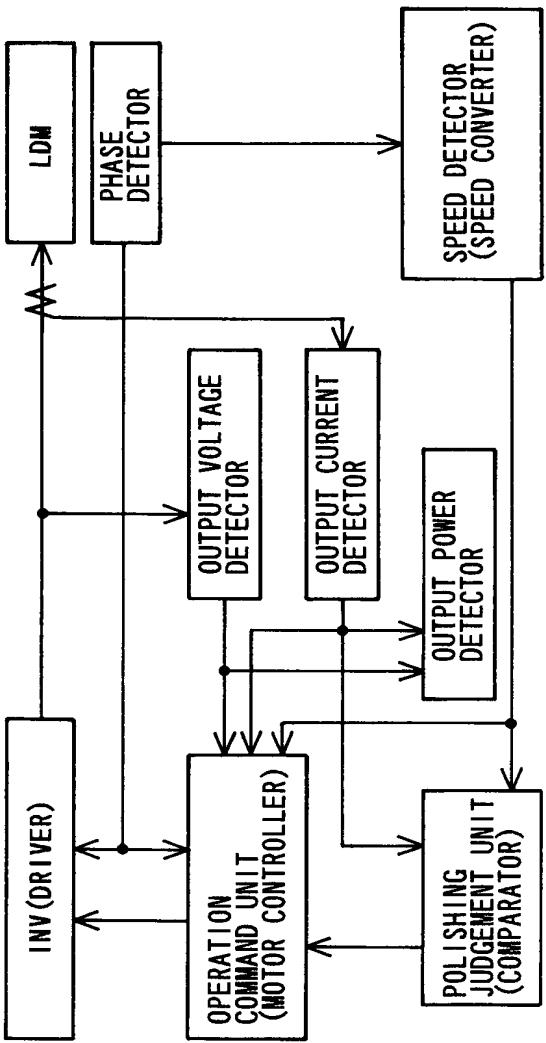
## CONSTANT OUTPUT FREQUENCY CONDITION

	CONSTANT OUTPUT VOLTAGE		VARIABLE OUTPUT VOLTAGE (HIGH EFFICIENCY)	
	LIGHT LOAD	HEAVY LOAD	LIGHT LOAD	HEAVY LOAD
VOLTAGE			SMALL	LARGE
CURRENT	SMALL	LARGE	SMALL	LARGE
POWER	SMALL	LARGE	SMALL	LARGE
POWER FACTOR	△	○	○	○

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*F / G. 20*



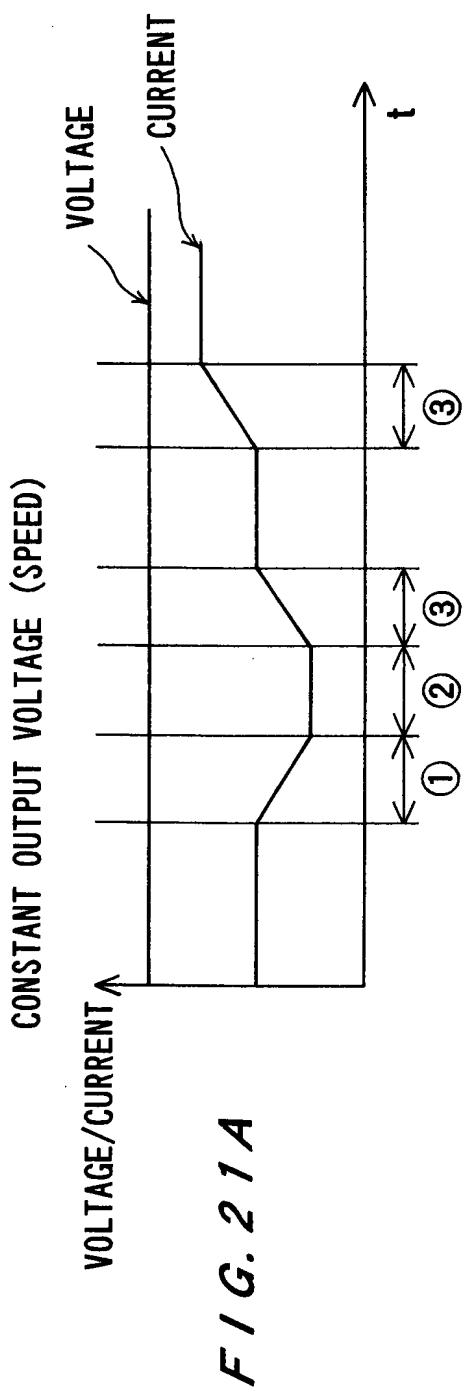
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VARIABLE SPEED CONDITION  
CONSTANT OUTPUT CURRENT

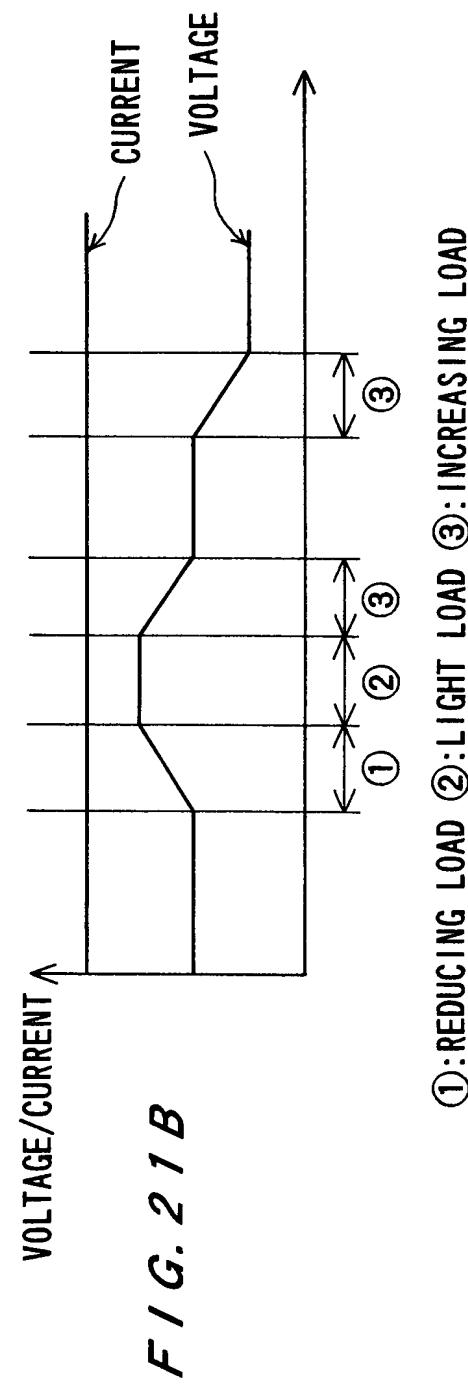
SPEED	LIGHT LOAD	HIGH	LOW
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CONSTANT SPEED CONDITION  
CONSTANT OUTPUT VOLTAGE

	LIGHT LOAD	HEAVY LOAD
VOLTAGE		
CURRENT	SMALL	LARGE
POWER	SMALL	LARGE
POWER FACTOR	△	○



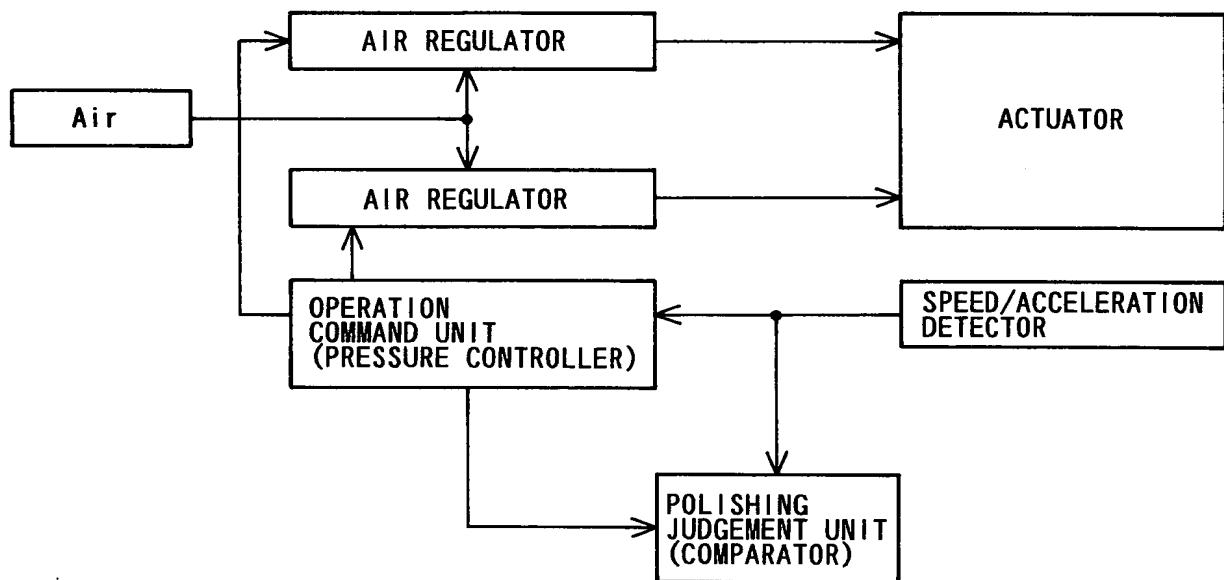
①:REDUCING LOAD ②:LIGHT LOAD ③:INCREASING LOAD



①:REDUCING LOAD ②:LIGHT LOAD ③:INCREASING LOAD

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F I G. 22



*F I G. 23*

